

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A display device comprising:

a plurality of pixels, each of the plurality of pixels comprising: each having a switching element and a light emitting a substrate in matrix;

a switching element,

a light-emitting element,

a plurality of source signal lines, ~~for one pixel column;~~ and

one gate signal line ~~for one pixel row,~~ and

a source signal line driver circuit comprising a constant current source,

wherein the constant current source is electrically connected to one of the plurality of source signal lines,

wherein the switching element has an input terminal, an output terminal, and a control terminal[[:]],

wherein the input terminal is electrically connected to any one of the plurality of source signal lines[[:]],

wherein the output terminal is electrically connected to the light-emitting element[[:]],

and

wherein the control terminal is electrically connected to the gate signal line.

2. (Currently Amended) A display device comprising:

a plurality of pixels, each of the plurality of pixels comprising: each having a switching element and a light emitting element over a substrate in matrix;

a switching element,

a light-emitting element,

a plurality of source signal lines, ~~for one pixel column;~~ and
one gate signal line ~~for one pixel row, and~~

a plurality of source signal line driver circuits, each of the plurality of source
signal line driver circuits comprising a constant current source,
wherein the constant current source is electrically connected to at least one of the
plurality of source signal lines[;]],

wherein the switching element has an input terminal, an output terminal, and a control
terminal[;]],

wherein the input terminal is electrically connected to any one of the plurality of source
signal lines[;]],

wherein the output terminal is electrically connected to the light-emitting element[;]],
and

wherein the control terminal is electrically connected to the gate signal line.

3. (Currently Amended) A display device comprising:

a plurality of pixels, each of the plurality of pixels comprising: each having a switching
element and a light-emitting element over a substrate in matrix;

a switching element,

a light-emitting element,

a plurality of source signal lines, ~~for one pixel column;~~ and

a gate signal lines for one pixel row, and

a source signal line driver circuit comprising a constant current source,

wherein the constant current source is electrically connected to one of the plurality of
source signal lines,

wherein the switching element has an input terminal, an output terminal, and a control
terminal[;]],

wherein the input terminal is electrically connected to any one of the plurality of source
signal lines[;]],

wherein the output terminal is electrically connected to the light-emitting element[[:]],
and

wherein the control terminal is electrically connected to one-of the gate signal line[[s]].

4. (Previously Presented) The display device according to claim 2,
wherein each of the plurality of source signal line driver circuits is a current output type
source signal line driver circuit.

5. (Previously Presented) The display device according to claim 2,
wherein each of the plurality of source signal line driver circuits is formed using a thin
film transistor.

6. (Previously Presented) The display device according to claim 2,
wherein each of the plurality of source signal line driver circuits is formed over the same
substrate as the switching element.

7. (Previously Presented) The display device according to claim 2,
wherein each of the plurality of source signal line driver circuits is mounted over a
semiconductor chip.

8. (Previously Presented) The display device according to claim 2,
wherein each of the plurality of the source signal line driver circuits is disposed on a side
of a region where the plurality of pixels are disposed.

9. (Previously Presented) The display device according to claim 2,
wherein at least one of the plurality of source signal line driver circuits drives any one of
the plurality of source signal lines.

10. (Previously Presented) The display device according to claim 2, wherein each of the plurality of source signal line driver circuits is formed using transistors having a single polarity.

11. (Previously Presented) The display device according to claim 3, wherein the gate signal line driver circuit is formed using a thin film transistor.

12. (Currently Amended) The display device according to claim 3, wherein the gate signal line driver circuit is formed [[on]] over the same substrate as the switching element.

13. (Previously Presented) The display device according to claim 3, wherein the gate signal line driver circuit is mounted over a semiconductor chip.

14. (Previously Presented) The display device according to claim 3, wherein the gate signal line driver circuit is formed using transistors having a single polarity.

15. (Previously Presented) The display device according to claim 1, wherein the switching element comprises one thin film transistor.

16. (Previously Presented) The display device according to claim 1, wherein the switching element comprises a multi-gate thin film translator.

17. (Previously Presented) The display device according to claim 1, wherein the light-emitting element is an EL element.

18. (Currently Amended) An electronic apparatus equipped with the display device according to claim 1, wherein the electronic apparatus is one selected from the group consisting of a video camera, a digital camera, a notebook personal computer, a mobile computer, a portable image reproducing device provided with a recording medium, a head mounted display, a game machine, a car navigation system, a personal computer, a portable information terminal, a mobile phone, an electronic book, a folding portable display device, and a wristwatch type display device.

19. (Currently Amended) A driving method of a display device comprising the steps of:
supplying current from a constant current source in a source signal line driver circuit to one of a plurality of source signal lines;

turning switching elements ON by driving a plurality of gate signal lines simultaneously;
inputting the current ~~a signal~~ of one of ~~[[a]]~~ the plurality of source signal lines to a light-emitting element; and

driving the light-emitting element,
~~wherein a plurality of pixels each having a switching element and the light emitting element is disposed on a substrate in matrix;~~

wherein the plurality of source signal lines are ~~[[is]]~~ disposed for one pixel column~~[[;]]~~,
~~wherein each of the plurality of gate signal lines is disposed for one pixel row;~~
wherein each of the switching elements has an input terminal, an output terminal, and a control terminal~~[[;]]~~,

wherein the input terminal is electrically connected to one of the plurality of source signal lines~~[[;]]~~,

wherein the output terminal is electrically connected to the light-emitting element~~[[;]]~~,
and

wherein the control terminal is electrically connected to one of the plurality of the gate signal lines.

- 19, 20. (Currently Amended) The driving method of the display device according to claim 19, wherein each of the switching elements comprises one thin film transistor.
- 19, 21. (Currently Amended) The driving method of the display device according to claim 19, wherein each of the switching elements comprises a multi-gate thin film transistor.
22. (Original) The driving method of the display device according to claim 19, wherein the light-emitting element is an EL element.
23. (Currently Amended) The display device according to claim 2, wherein the switching element ~~consists of~~ comprises one thin film transistor.
24. (Currently Amended) The display device according to claim 3, wherein the switching element ~~consist of~~ comprises one thin film transistor.
25. (Currently Amended) The display device according to claim 2, wherein the switching element ~~consist of~~ comprises a multi-gate thin film transistor.
26. (Currently Amended) The display device according to claim 3, wherein the switching element ~~consist of~~ comprises a multi-gate thin film transistor.
27. (Previously Presented) The display device according to claim 2, wherein the light-emitting element is an EL element.
28. (Previously Presented) The display device according to claim 3, wherein the light-emitting element is an EL element.

29. (Currently Amended) An electronic apparatus equipped with the display device according to ~~any one of~~ claim 2, wherein the electronic apparatus is one selected from the group consisting of a video camera, a digital camera, a notebook personal computer, a mobile computer, a portable image reproducing device provided with a recording medium, a head mounted display, a game machine, a car navigation system, a personal computer, a portable information terminal, a mobile phone, an electronic book, a folding portable display device, and a wristwatch type display device.

30. (Currently Amended) An electronic apparatus equipped with the display device according to claim 3, wherein the electronic apparatus is one selected from the group consisting of a video camera, a digital camera, a notebook personal computer, a mobile computer, a portable image reproducing device provided with a recording medium, a head mounted display, a game machine, a car navigation system, a personal computer, a portable information terminal, a mobile phone, an electronic book, a folding portable display device, and a wristwatch type display device.

31. (New) The display device according to claim 1, wherein the source signal line driver circuit is a current output type source signal line driver circuit.

32. (New) The display device according to claim 1, wherein the source signal line driver circuit is formed using a thin film transistor.

33. (New) The display device according to claim 1, wherein the source signal line driver circuit is formed over the same substrate as the switching element.

34. (New) The display device according to claim 1, wherein the source signal line driver circuit is mounted over a semiconductor chip.

35. (New) The display device according to claim 1, wherein the source signal line driver circuit is disposed on a side of a region where the plurality of pixels are disposed.

36. (New) The display device according to claim 1, wherein the source signal line driver circuit drives any one of the plurality of source signal lines.

37. (New) The display device according to claim 1, wherein the source signal line driver circuit is formed using transistors having a single polarity.

38. (New) The display device according to claim 3, wherein the source signal line driver circuit is a current output type source signal line driver circuit.

39. (New) The display device according to claim 3, wherein the source signal line driver circuit is formed using a thin film transistor.

40. (New) The display device according to claim 3, wherein the source signal line driver circuits is formed over the same substrate as the switching element.

41. (New) The display device according to claim 3, wherein the source signal line driver circuit is mounted over a semiconductor chip.

42. (New) The display device according to claim 3, wherein the source signal line driver circuit is disposed on a side of a region where the plurality of pixels are disposed.

43. (New) The display device according to claim 3, wherein the source signal line driver circuit drives any one of the plurality of source signal lines.

44. (New) The display device according to claim 3, wherein the source signal line driver circuit is formed using transistors having a single polarity.